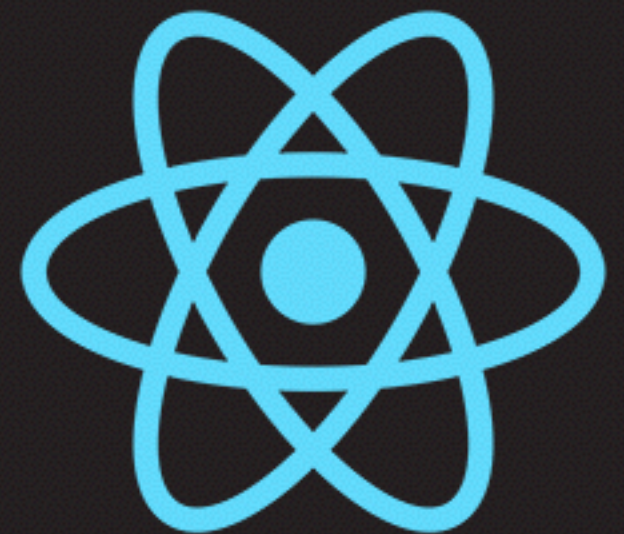


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REACT NATIVE: PUSH NOTIFICATIONS AND RENDERING MAPS WITH MAPVIEW



INTRODUCTION

- Let's finish strong by looking at how we can implement AirBnB's `<MapView>` component into our apps to create custom maps!
- In addition, we'll see how we can use packages such as Expo to speed up development.

DISPLAYING MAPS WITH MAPVIEW

- In order to work with Maps inside of our application, we're going to see how we can use Airbnb's open-source **react-native-maps** package to display elegant custom maps.
 - <https://github.com/react-community/react-native-maps>
- First and foremost, in order to begin, you'll need to get an API key from Google for the OS that you are targeting. You can get an API key at the following links:
 - **iOS:** <https://developers.google.com/maps/documentation/ios-sdk/get-api-key>
 - **Android:** <https://developers.google.com/maps/documentation/ios-sdk/get-api-key>
- This is going to be one of the first packages we use that will require some custom OS implementation for both iOS and Android. In order to see the steps required for development, please see <https://github.com/react-community/react-native-maps/blob/master/docs/installation.md>

REACT NATIVE MAPS

- You can install React Native Maps via npm:
 - **npm install --save react-native-maps**
- **Note:** the installation instructions inside of the official GitHub repo for Android leave out a bit of info that you need regarding updating your version of Gradle. The following is a fantastic resource to guide you through both the process of setting up React Native Maps and updating your version of Gradle:
 - <https://itnext.io/install-react-native-maps-with-gradle-3-on-android-44f91a70a395>

REACT NATIVE MAPS

- Once you have the platform-specific installation instructions completed, you can add a new map to your project by importing the **<MapView>** component.
 - **import MapView from 'react-native-maps'**
- The MapView component can contain multiple properties to custom display the map, such as the region, style, type (satellite, standard, etc.), and zoom level.
 - An important property to keep mind is the ability to disable scrolling of maps intended to be static, which is toggled with **scrollEnabled**. You may also want to set **cacheEnabled** as well to conserve resources.

REACT NATIVE MAPS

- In order to trigger a custom event when the map is changed by the user, you would use the **onRegionChange** property, which accepts a function as it's argument.
- You can also get the updated map information for performing updates, such as updating data based on location inside of a **region** argument.

REACT NATIVE MAPS

- In addition to creating the map, there are a bunch of additional map components that you can use inside of your map, including:
 - Markers
 - Overlays
 - Polygons
 - Circles
 - Polylines (multiple connected lines)
 - Callouts (similar to tooltips)
- Each component requires it's own set of unique properties, so it's best to consult the documentation when implementing these.

EXERCISE: WORKING WITH MAPS

- Let's upgrade our Free Agent Tinder App to show some maps instead of images. Please note, the API has been updated accordingly.
- Make sure that the maps are static, or else it will be very hard to swipe them away!
- Add a marker of the centre location to give it some additional style!

NOW LET'S DO IT WITH
EXPO!

RESOURCES

- **React Native Maps:**
 - **Official:** <https://github.com/react-community/react-native-maps>
 - **Installation Instructions:** <https://github.com/react-community/react-native-maps/blob/master/docs/installation.md>
 - **Installation Tutorial:** <https://itnext.io/install-react-native-maps-with-gradle-3-on-android-44f91a70a395>

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